



We cannot say that the continued use of herbicides, insecticides, and other biocides will lead to the eventual extermination of man. Neither, however, can we afford to rest easily.

Raymond F. Dasmann  
Vital Issues  
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## Forum

### Burning Border Health Issues

A small county in Arizona is plagued by unusually high rates of lupus erythematosus and cancer, and residents are looking at air and water pollution from neighboring Mexico as the culprits.

A study released last December confirmed that the population of Santa Cruz county, located along the Mexican border, suffers from 2.4 times the National Cancer Institute's expected rate of multiple myeloma, a form of bone marrow cancer, and almost twice the expected number of lupus cases. The study, conducted by the University of Arizona Cancer Center, found that there were 12 cases of multiple myeloma from 1989 to 1993 in the county of about 30,000, while the expected rate is 5 cases per 100,000 people.

The study also found 94 cases of lupus per 100,000 people, whereas 50.8 cases per 100,000 are expected. According to Brad Christensen, a spokesperson for the Arizona Department of Health Services (ADHS), this is the highest incidence of lupus cases in one area on record in the world.

The study was undertaken at the urging of residents of Nogales, the town most affected by the illnesses, to investigate the health problems. In 1992, a group of can-

cer victims and their family members who were concerned about the high rates of disease formed a grassroots organization, Living Is for Everyone (LIFE), to lobby state officials and draw attention to the problem.

"The group grew out of the need to address what we thought at the time were only health issues," said Ana Acuna, a 54-year-old lupus patient who helped form the organization. "We had a suspicion that environmental factors were involved, and from there grew the tie to the environment."

In December 1993, the governor, university officials, and ADHS officials responded to LIFE's requests and visited Nogales. "We visited Carillo Street, which is a small neighborhood, and it seemed like every other household was touched by cancer," Christensen said.

The ADHS then committed \$100,000 and contracted the university to conduct a study. Although the study did confirm that the disease incidences are unusually high, the researchers did not find an obvious link to environmental problems. However, epidemiologist Larry Clark, who headed the study, said environmental substances were probably a trigger for the lupus increase.

The residents believe the source of their health problems lies across the border in a landfill that catches on fire weekly. Burning in dumps is illegal in the United States because the practice causes air pollution and poses a health threat. The residents also blame their poor health on sewage and toxic chemicals that are carried north in a wash that runs through Nogales.

Following the release of the study, the director of the ADHS, Jack Dillenberg, took several copies to the Center for Disease Control in Atlanta to draw federal attention to the problem.

Dillenberg told *Healthlink*, a publication of the ADHS, that he felt the meetings were positive. "I want the CDC to recognize we've got some valuable data now, and I want them to get involved," he said. "Clearly this is a problem that requires solutions beyond what the city, the county, and the state can offer."

According to Christensen, the Santa Cruz community has been very pleased with the response of federal officials to date. On March 22, medical epidemiologist Rossanne Philen, of the CDC, visited Nogales and made a commitment to help further the study of the illnesses, possibly by placing a researcher on the border to look for the causes.

In addition, the Interagency Coordinating Council, which is made up of members of the EPA and the CDC, held a meeting May 2-3 in Rio Rico, which is just north of Nogales, to discuss border issues.

Mexican health officials indicated they would attend the meeting. According to Christensen, Mexican officials have responded well to the issue. Since the study was released, officials closed the dump in question and opened a new dump eight miles away that does not burn waste.

### Drink and Diet

Now there's another reason to eat your fruits and vegetables. New research conducted at the Harvard University School of Public Health shows that poor diet combined with a high intake of alcohol increases the risk of colon cancer.

Edward Giovannucci co-authored the



Mario Aguilar/Green Valley News

**Noxious neighbors?** Residents of Nogales, Arizona, believe their health problems may stem from pollution from a Mexican landfill across the border.